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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,963	06/23/2000	Nicholas W. Dawes	551P07US-1	9819

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EXAMINER

LEE, CHI HO A

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 08/09/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/599,963

Applicant(s)

DAWES ET AL.

Examiner

Andrew Lee

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2000.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 23-26 is/are allowed.
6) ☒ Claim(s) 1-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-12, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hefel et al U.S. Patent Number 5,563,875.

Re Claims 1, 7, fig. 4 teaches a Node A (common node) sending signals to Node B & C (first and second) to measure the round trip delays to compute the transmit time (See Abstract & col. 5, lines 46 +).

Re Claims 2, 9, refer to Claim 1, Node A is directed connected to Node B.

Re Claims 3, 10, refer to Claim 1, Node C is indirectly connected to Node A.

Re Claim 4, refer to Claim 1, wherein Node A is Network management computer.

Re Claims 5, 8, 11, refer to Claim 1, fig. 4 is a hierarchical network and is a portion of the mesh network, i.e., SNA (See col. 1, line 60) wherein the subnetworks are formed between the nodes, i.e., Node A to Node B & Node A to Node C.

Re Claim 6, refer to Claim 1, wherein adding the transmit time gives the total transmit time of the complete path between the source and destination.

Re Claim 12, refer to Claim 6, wherein the interim transit delay is formed between Node A - Node B subnetwork (adjacent nodes).

Re Claim 22, refer to Claim 1, wherein the total transit time is the total jitter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-²¹ are rejected under 35 U.S.C. 103(a) as being unpatentable over Hefel et al U.S. Patent Number 5,563,875 in view of Grohn et al U.S. Patent Number 6,405,337 and further in view of Larson U.S. Patent Number 4,569,042.

Re Claims 13, 19, refer to Claim 1, Hefel teaches measuring the transit time between to nodes A & B (measuring a transmit delay) wherein plurality of link transit times can be analyzed to localize congestion or identify failed resources (See abstract). Hefel fails to explicitly teach that the transmit delays are measured at different times. However, Grohn teaches that repeated round-trip measurement are performed because the round-trip delay over the communications network can change over time, hence repeatedly measuring the transit time would have reflected the condition of the network (See col. 5, lines 10-15). Therefore, one skilled in the art would have been motivated to measure the transit delay at different times to adaptive to the current condition of the network. Hefel also fails to explicitly teach calculating a jitter among the plurality of time delay measurements and determining if the jitter exceeds a predetermined threshold value. However, Larson teaches a difference calculator 204 and the delay calculator wherein the value of the estimated one-way delay computed by the delay calculator 205 is compared with a value of a predetermined maximum acceptable one-way delay

(See col. 7, lines 34-68). One skilled in the art would have been motivated by Larson to compare the jitter with the predetermined threshold value to determine whether the route is acceptable or reliability. Therefore, it would have been obvious to one ordinary skilled to combine the teaching of Grohn and Hefel into the teaching of Hefel.

Re Claim 14, refer to Claim 1.

Re Claim 15, refer to Claim 6.

Re Claims 16, 17, refer to Claim 5.

Re Claim 18, refer to Claim 13.

Re Claim 20, refer to Claim 2.

Re Claim 21, refer to Claim 3.

Allowable Subject Matter

5. Claims 23-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to teaches, as recited in Claim 23, the step of calculating the jitter based on the $J(A,B)$ formula.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AI
8/4/04

ANDY LEE
PATENT EXAMINER

